



# Monthly Wholesale Trade

## Sales and Inventories

April 1998

U.S. Department of Commerce  
Economics and Statistics Administration  
BUREAU OF THE CENSUS

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### MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES April 1998

**Sales.** April 1998 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$214.0 billion, up 0.1 percent (+/- 0.7%) from the revised March level and were 3.1 percent (+/-1.2%) above the April 1997 level. The March preliminary estimate was revised upward by \$0.2 billion or 0.1 percent. April sales of durable goods increased 1.0 percent (+/-0.8%) from March and were 5.2 percent (+/-1.7%) above last year. Compared to last month, sales of lumber and other construction materials were up 2.8 percent, while metals and minerals, except petroleum, declined 2.4 percent. Sales of nondurable goods decreased 0.9 percent (+/-0.8%) from last month but were up 0.7 percent (+/-1.9%) from a year ago. Compared to last month, sales of farm-product raw materials fell 4.2 percent, and apparel, piece goods and notions declined 3.0 percent.

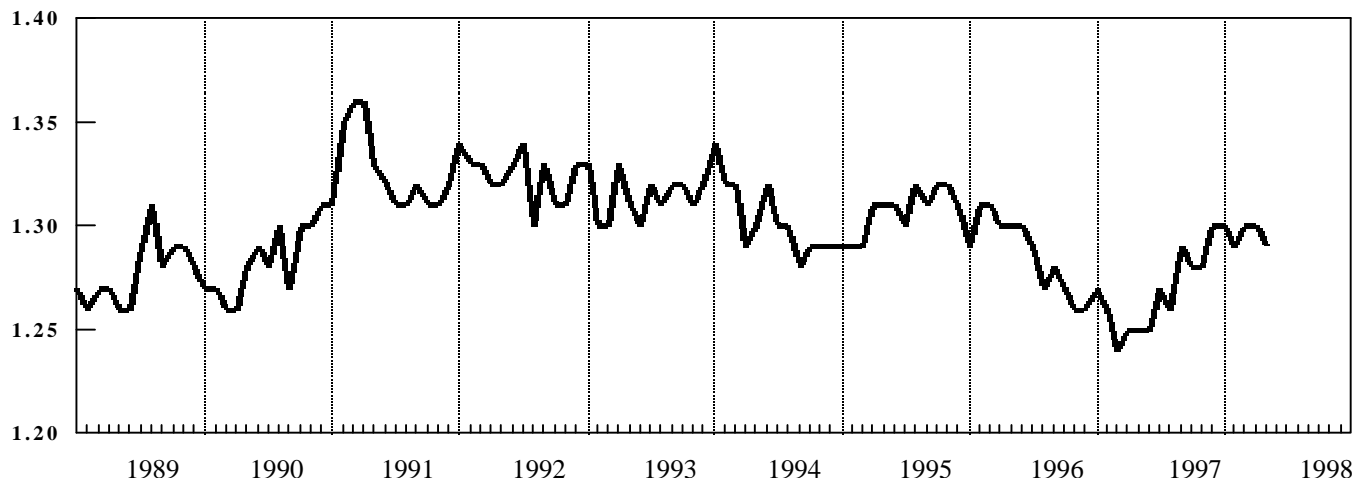
**Inventories.** Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$275.8 billion at the end of April, down 0.6 percent (+/-0.5%) from the revised March level but were 6.3 percent (+/-1.3%) above April

1997. The March preliminary estimate was revised upward by \$0.5 billion or 0.2 percent. Among durable goods, inventories of motor vehicles and automotive equipment decreased 4.7 percent from March, while furniture and home furnishings increased 2.9 percent. End-of-month inventories of nondurable goods declined 1.6 percent (+/- 0.9%) from last month but were 4.8 percent (+/- 1.7%) above the April 1997 level. Compared to last month, inventories of farm-product raw materials were down 8.2 percent, and beer, wine, and distilled alcoholic beverages fell 4.6 percent.

**Inventories/Sales Ratio.** The April inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.29. The April 1997 ratio was 1.25.

*Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling variability. A discussion of the reliability of the data and general survey methodology appears in BW/97-RV Current Business Reports.*

#### Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1989 to 1998 (Data adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for May is scheduled to be released July 8, 1998 at 10:00 a.m.

Address inquiries concerning this report to Services Division, Bureau of the Census, Washington, DC 20233, or call Ronald Piencykoski, (301) 457-2779 or 457-2764. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

This report is available on day of issue through the Department of Commerce's online Economic Bulletin Board (202-482-1986). The data are also available on the internet - <http://www.census.gov/svds/www/mwts.html>.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers: 1998 and 1997

[In millions of dollars]

SIC <sup>1</sup> code	Kind of business	Sales						Inventories						Inventories/Sales		
		Monthly			Percent change			Monthly			Percent change			ratios		
		Apr. 1998 (p)	Mar. 1998 (r)	Apr. 1997 (r)	Apr./ Mar.	Mar./ Feb.	Apr. 98 Apr. 97	Apr. 1998 (p)	Mar. 1998 (r)	Apr. 1997 (r)	Apr./ Mar.	Mar./ Feb.	Apr. 98 Apr. 97	Apr. 1998 (p)	Mar. 1998 (r)	Apr. 1997 (r)
Adjusted <sup>2</sup>																
	U.S. Total	213,997	213,781	207,649	0.1	1.2	3.1	275,831	277,624	259,404	-0.6	0.7	6.3	1.29	1.30	1.25
50	Durable	114,866	113,732	109,236	1.0	1.4	5.2	182,526	182,822	170,355	-0.2	1.0	7.1	1.59	1.61	1.56
501	Automotive	19,167	18,800	17,829	2.0	2.9	7.5	29,188	30,612	27,619	-4.7	3.3	5.7	1.52	1.63	1.55
502	Furniture	3,416	3,473	3,431	-1.6	1.6	-0.4	5,528	5,371	5,451	2.9	-2.1	1.4	1.62	1.55	1.59
503	Lumber	7,543	7,337	7,676	2.8	-0.7	-1.7	7,879	7,712	8,087	2.2	-0.4	-2.6	1.04	1.05	1.05
504	Prot. equip.	21,796	21,478	19,551	1.5	3.0	11.5	27,258	26,972	24,220	1.1	1.2	12.5	1.25	1.26	1.24
505	Metals	8,755	8,974	8,957	-2.4	0.5	-2.3	14,088	14,111	13,569	-0.2	-0.2	3.8	1.61	1.57	1.51
506	Electrical	17,235	17,110	16,660	0.7	1.0	3.5	26,551	26,269	25,044	1.1	2.0	6.0	1.54	1.54	1.50
507	Hardware	6,616	6,622	6,477	-0.1	-1.7	2.1	13,268	13,016	12,289	1.9	-0.7	8.0	2.01	1.97	1.90
508	machinery	18,818	18,506	17,062	1.7	0.8	10.3	42,945	42,774	39,066	0.4	1.2	9.9	2.28	2.31	2.29
509	Other Durable	11,520	11,432	11,593	0.8	1.5	-0.6	15,821	15,985	15,010	-1.0	-0.8	5.4	1.37	1.40	1.29
51	Nondurable	99,131	100,049	98,413	-0.9	0.9	0.7	93,305	94,802	89,049	-1.6	0.0	4.8	0.94	0.95	0.90
511	Paper	7,383	7,528	7,072	-1.9	3.4	4.4	9,126	9,241	8,156	-1.2	1.4	11.9	1.24	1.23	1.15
512	Drugs	10,774	11,081	9,167	-2.8	1.9	17.5	14,821	14,513	11,826	2.1	2.9	25.3	1.38	1.31	1.29
513	Apparel	7,089	7,311	7,136	-3.0	-1.1	-0.7	12,019	11,979	11,370	0.3	0.6	5.7	1.70	1.64	1.59
514	Groceries	28,475	28,419	27,244	0.2	0.6	4.5	16,368	16,092	15,447	1.7	-2.4	6.0	0.57	0.57	0.57
515	Farm-products	8,739	9,118	10,474	-4.2	-1.8	-16.6	9,847	10,725	11,075	-8.2	-3.0	-11.1	1.13	1.18	1.06
516	Chemicals	4,529	4,547	4,574	-0.4	-3.6	-1.0	4,877	4,775	4,669	2.1	-0.4	4.5	1.08	1.05	1.02
517	Petroleum	11,845	11,979	13,147	-1.1	0.3	-9.9	4,467	4,513	5,043	-1.0	0.1	-11.4	0.38	0.38	0.38
518	Alcohol	4,778	4,833	4,407	-1.1	4.0	8.4	5,132	5,381	4,684	-4.6	3.6	9.6	1.07	1.11	1.06
519	Other Nondur.	15,519	15,233	15,192	1.9	3.3	2.2	16,648	17,583	16,779	-5.3	-0.5	-0.8	1.07	1.15	1.10
Not Adjusted														Sales to date		
	U.S. Total	216,058	222,363	209,445	-2.8	15.1	3.2	278,205	279,048	261,637	-0.3	0.0	6.3	829,047		808,374
50	Durable	114,636	119,747	109,408	-4.3	18.1	4.8	183,939	182,652	171,609	0.7	0.8	7.2	437,830		416,835
501	Automotive	19,972	20,605	18,667	-3.1	23.7	7.0	29,422	30,826	27,868	-4.6	0.3	5.6	73,559		70,578
502	Furniture	3,433	3,591	3,424	-4.4	19.4	0.3	5,406	5,317	5,337	1.7	-0.9	1.3	13,182		13,281
503	Lumber	7,641	7,242	7,922	5.5	16.1	-3.5	8,076	7,943	8,289	1.7	1.5	-2.6	27,486		28,060
504	Prof. equip.	21,077	22,638	18,847	-6.9	19.1	11.8	27,340	26,864	24,293	1.8	2.1	12.5	82,182		73,969
505	Metals	9,105	9,638	9,378	-5.5	14.6	-2.9	14,215	14,280	13,705	-0.5	0.9	3.7	35,814		35,099
506	Electrical	16,546	17,965	16,060	-7.9	16.6	3.0	26,524	25,849	24,969	2.6	0.3	6.2	65,207		63,219
507	Hardware	6,451	6,364	6,393	1.4	9.9	0.9	13,494	13,159	12,486	2.5	0.6	8.1	24,591		23,203
508	Machinery	19,571	19,986	17,796	-2.1	17.6	10.0	43,847	43,116	39,847	1.7	2.0	10.0	73,578		66,679
509	Other Durable	10,840	11,718	10,921	-7.5	18.0	-0.7	15,615	15,298	14,815	2.1	-2.8	5.4	42,231		42,747
51	Nondurable	101,422	102,616	100,037	-1.2	11.9	1.4	94,266	96,396	90,028	-2.2	-1.5	4.7	391,217		391,539
511	Paper	7,309	7,844	7,065	-6.8	14.1	3.5	9,226	9,287	8,254	-0.7	2.1	11.8	29,366		27,926
512	Drugs	10,849	11,436	9,314	-5.1	14.1	16.5	14,806	14,498	11,814	2.1	1.1	25.3	43,134		35,736
513	Apparel	6,735	7,991	6,751	-15.7	7.4	-0.2	11,682	11,548	11,018	1.2	-3.8	6.0	28,943		27,623
514	Groceries	28,333	28,675	26,944	-1.2	11.7	5.2	16,139	15,802	15,231	2.1	-1.5	6.0	109,135		106,405
515	Farm-products	8,529	9,501	10,338	-10.2	6.2	-17.5	9,955	11,915	11,197	-16.4	-10.8	-11.1	37,752		42,454
516	Chemicals	4,710	4,697	4,771	0.3	5.9	-1.3	4,950	4,861	4,734	1.8	-0.2	4.6	18,435		18,040
517	Petroleum	12,141	12,039	13,463	0.8	5.6	-9.8	4,458	4,387	5,028	1.6	-0.6	-11.3	47,729		57,767
518	Alcohol	4,783	4,606	4,376	3.8	21.9	9.3	5,153	5,284	4,698	-2.5	7.2	9.7	16,738		15,756
519	Other Nondur.	18,033	15,827	17,015	13.9	20.6	6.0	17,897	18,814	18,054	-4.9	0.1	-0.9	59,985		59,832

p Preliminary estimate. r Revised.

1 For a full description of the SIC Codes shown above see the "1987 Standard Industrial Classification Manual" or the Current Business Reports

"Annual Benchmark Report for Wholesale Trade" publication.

2 Data adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for seasonal adjustment factors used.

**Table 2. Coefficients of Variation and Standard Error for Sales and Inventories**

SIC code	Kind of business	Coefficients of variation for level (x 100)				Standard error for trend				Coefficients of variation for level (x 100)		Standard error for trend
		Preliminary estimates		Final estimates		Ratio of two consecutive months		Year to Year Estimates		Cumulative sales estimates		Current year cumulative
		Sales	Inv	Sales	Inv	Sales	Inv	Sales	Inv	CY	PY	to previous year cumulative
		Median	Median	Median	Median	Median	Median	Median	Median			
	<b>U.S. Total</b>	<b>1.0</b>	<b>1.3</b>	<b>1.0</b>	<b>1.4</b>	<b>0.4</b>	<b>0.2</b>	<b>0.7</b>	<b>1.1</b>	<b>0.9</b>	<b>0.6</b>	<b>0.3</b>
<b>50</b>	<b>Durable</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>	<b>2.2</b>	<b>0.7</b>	<b>0.3</b>	<b>1.2</b>	<b>1.5</b>	<b>2.0</b>	<b>2.4</b>	<b>0.7</b>
501	Automotive	4.1	5.4	4.1	5.4	1.2	0.8	2.8	3.8	4.2	3.8	2.0
502	Furniture	6.4	7.6	6.4	7.4	2.2	1.0	4.6	6.7	6.3	5.3	2.5
503	Lumber	4.9	5.8	5.0	5.9	1.2	0.8	3.7	4.2	5.0	5.6	2.3
504	Prof. equip.	5.5	6.4	5.5	6.5	1.4	0.7	3.4	4.0	4.5	5.6	2.6
505	Metals	4.6	9.2	4.5	9.2	1.3	0.7	2.7	6.7	4.5	4.4	1.3
506	Electrical	5.2	4.7	5.2	4.5	1.4	0.5	2.9	2.3	6.0	4.6	1.8
507	Hardware	5.0	4.8	5.0	4.8	1.2	0.5	4.3	3.4	5.0	4.6	1.1
508	Machinery	5.8	5.4	5.8	5.1	1.7	0.5	4.3	3.7	6.4	6.2	2.5
509	Other Durable	5.1	7.6	5.0	7.2	1.5	0.7	2.6	4.7	5.7	4.7	2.2
<b>51</b>	<b>Nondurable</b>	<b>1.9</b>	<b>2.1</b>	<b>1.9</b>	<b>2.2</b>	<b>0.5</b>	<b>0.4</b>	<b>1.2</b>	<b>1.4</b>	<b>1.8</b>	<b>0.5</b>	<b>0.5</b>
511	Paper	4.3	3.9	4.3	3.9	1.1	0.4	4.3	4.9	5.0	0.3	0.2
512	Drugs	5.8	5.0	5.7	5.0	0.7	0.4	3.3	1.7	6.3	5.6	2.4
513	Apparel	5.4	7.7	5.3	7.8	2.1	0.8	3.1	4.4	5.2	4.5	2.2
514	Groceries	3.0	5.4	2.9	5.4	0.8	0.5	1.8	4.0	2.9	3.1	0.8
515	Farm-products	5.3	8.1	5.3	8.1	2.3	1.6	2.9	4.4	4.3	4.1	1.9
516	Chemicals	5.9	5.7	5.9	5.5	1.3	0.6	3.5	2.8	5.8	5.9	1.7
517	Petroleum	5.9	13.9	5.9	14.2	1.0	0.8	2.5	6.7	5.7	5.4	1.2
518	Alcohol	6.3	6.2	6.4	6.1	1.7	1.3	4.7	5.5	6.2	6.9	1.2
519	Other Nondur.	6.1	6.0	6.0	5.9	1.8	1.0	5.3	5.0	6.5	5.7	2.6

Note: The median measures of variability are based on the most recent 12 months of data.

### Sample Design and Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the trend estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is  $\pm 1.65 \times 0.9\%$  or  $\pm 1.5\%$ , and the 90% confidence interval is -0.3% to +2.7%. If the interval contains 0, it cannot be stated with certainty whether there was an increase or decrease. For monthly level, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value  $\pm 1.65 \times CV \times$  (the estimated value).

Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample, (2) inability to obtain

information about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of collection or processing, or in imputing for missing or inconsistent data. Coverage error has an effect on the accuracy of estimates for this survey to the extent that the administrative records system, which forms the basis of our survey universe frame, does not contain all legal businesses. A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For all kinds of businesses combined, imputed data amount to about 26 percent of the total monthly wholesale sales estimates and 28 percent of the total monthly wholesale inventories estimates.

Nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

Official Business

Penalty for Private Use, \$300

**Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers**

SIC code	Kind of business	Sales						Inventories					
		199					1997	1998					1997
		May	Apr.r	Mar.r	Feb.	Jan.	Apr.r	May	Apr.r	Mar.r	Feb.	Jan.	Apr.r
	<b>U.S. Total<sup>1</sup></b>	<b>0.986</b>	<b>1.007</b>	<b>1.034</b>	<b>0.916</b>	<b>0.940</b>	<b>1.008</b>	<b>0.995</b>	<b>1.008</b>	<b>1.008</b>	<b>1.013</b>	<b>1.021</b>	<b>1.008</b>
<b>50</b>	<b>Durable</b>	<b>0.977</b>	<b>0.996</b>	<b>1.048</b>	<b>0.904</b>	<b>0.913</b>	<b>1.000</b>	<b>1.007</b>	<b>1.007</b>	<b>1.000</b>	<b>1.002</b>	<b>0.999</b>	<b>1.007</b>
501	Automotive	1.007	1.042	1.096	0.911	0.912	1.047	1.011	1.008	1.007	1.037	1.015	1.009
502	Furniture	0.978	1.005	1.034	0.880	0.884	0.998	1.007	0.978	0.990	0.977	0.975	0.979
503	Lumber	1.036	1.013	0.987	0.844	0.843	1.032	1.023	1.025	1.030	1.011	0.983	1.025
504	Prof. equip.	0.942	0.967	1.054	0.911	0.950	0.964	0.989	1.003	0.996	0.987	1.013	1.003
505	Metals	1.006	1.040	1.074	0.942	0.966	1.047	1.002	1.009	1.012	1.001	1.010	1.010
506	Electrical	0.945	0.960	1.050	0.910	0.917	0.964	0.999	0.999	0.984	1.000	1.002	0.997
507	Hardware	0.979	0.975	0.961	0.860	0.894	0.987	1.023	1.017	1.011	0.998	0.985	1.016
508	Machinery	0.996	1.040	1.080	0.926	0.928	1.043	1.015	1.021	1.008	1.000	0.990	1.020
509	Other Durable	0.948	0.941	1.025	0.881	0.873	0.942	1.005	0.987	0.957	0.977	0.988	0.987
<b>51</b>	<b>Nondurable</b>	<b>0.993</b>	<b>1.018</b>	<b>1.028</b>	<b>0.926</b>	<b>0.968</b>	<b>1.015</b>	<b>0.971</b>	<b>1.010</b>	<b>1.019</b>	<b>1.032</b>	<b>1.062</b>	<b>1.010</b>
511	Paper	0.942	0.990	1.042	0.944	0.998	0.999	0.986	1.011	1.005	0.999	1.020	1.012
512	Drugs	0.939	1.007	1.032	0.922	1.025	1.016	0.945	0.999	0.999	1.017	1.077	0.999
513	Apparel	0.815	0.950	1.093	1.006	0.925	0.946	0.971	0.972	0.964	1.008	1.040	0.969
514	Groceries	1.013	0.995	1.009	0.908	0.975	0.989	0.984	0.986	0.982	0.973	1.001	0.986
515	Farm-products	0.972	0.976	1.042	0.963	1.069	0.987	0.875	1.011	1.111	1.208	1.276	1.011
516	Chemicals	1.034	1.040	1.033	0.940	0.955	1.043	1.015	1.015	1.018	1.016	0.995	1.014
517	Petroleum	0.994	1.025	1.005	0.955	1.012	1.024	0.998	0.998	0.972	0.979	0.998	0.997
518	Alcohol	1.019	1.001	0.953	0.813	0.783	0.993	0.974	1.004	0.982	0.949	0.934	1.003
519	Other Nondur.	1.101	1.162	1.039	0.890	0.865	1.120	1.020	1.075	1.070	1.063	1.053	1.076



r Revised

<sup>1</sup> Adjusted sales and inventories data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.